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COMMUNICATION STRATEGY ON AVIAN INFLUENZA HEALTH SEEKING BEHAVIORS

November 23, 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Development Alternatives, Inc.

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Title:	Communication Strategy on Avian Influenza Health Seeking Behaviors
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Contracting officer's representative:	Artha Camellia
Contract number:	AID-EDH-I-00-05-00004-00
Order number:	AID-497-TO-11-00001
Contractor:	DAI
DAI project number:	1001470
Submitted:	November 23, 2012

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Abbreviations

AI	Avian Influenza
CDC	Centers for Disease Control
C-KAP	Clinicians' Knowledge, Attitudes and Practices
HUS	Healthcare Utilization Survey
ILI	Influenza-like Illness
MOH	Ministry of Health
PMI	Palang Merah Indonesia (Indonesian Red Cross)
SAFE	Strategies Against Flu Emergence
USAID	United States Agency for International Development
WHO	World Health Organization

I. Introduction

I.1. Background

AI continues to present substantial risks to human and animal health in Indonesia. Indonesia continues to have the highest number of confirmed human cases of AI and one of the highest case fatality rates in the world. To date, avian influenza (AI) has infected 608 persons around the world, with a global case fatality rate of 59 percent. Indonesia accounts for 191 of these cases, and has a case fatality rate of 83 percent (191 cases and 159 deaths)[1] due to a higher-than-average hospital reporting time of six days.[2]

Respiratory disease and influenza-like illnesses (ILIs) are extremely common in Indonesia and experts estimate that the actual number of H5N1 cases is several times higher than the confirmed total with many cases unidentified, misidentified, or unreported.

While H5N1 is not readily transmitted among humans, the virus is endemic in animal populations in Indonesia, raising the possibility that H5N1 could at some point evolve into a form more easily transmissible between humans and causing a pandemic. Direct and indirect exposure to live and domesticated birds, poultry waste, and poultry in wet markets is extremely common throughout Indonesia.

Efforts have been made to look into the overall issues surrounding the poultry trade, service delivery, and care-seeking behavior to better understand how to remove the current constraints to the adoption of positive behaviors.

I.2. Purpose of this communication strategy

This document is a supplement to the previously developed "SAFE Communication Strategy on Avian Influenza Prevention in Indonesia". It recommends program communication interventions related to AI health care seeking behaviors that contribute to SAFE's Objective: *to increase knowledge of signs/symptoms and risk factors for AI-related illness in people and promote behaviors that improve household-level care-seeking in response to AI-related illnesses.* As a result of USAID changes to this objective at the beginning of Year 1 and a subsequent Year 2 reduction in overall project funding and new scope of work, the scope under this objective has been reduced considerably. SAFE will use this document to guide the implementation of a focused program conducted through existing local partners.

II. Situational Analysis

To understand how healthcare seeking decisions are made by members of a household and how health care providers manage suspect AI cases at point of service, SAFE conducted two surveys: the Healthcare Utilization Survey (HUS) and the Clinicians' Knowledge, Attitudes and Practices (C-KAP).

The HUS survey was designed to generate estimates of the seasonal influenza disease burden and to determine the proportion of people with ILI that seek care, their understanding of the signs and symptoms that indicate the need for care, and decision-making about when and where to seek care for

[1] World Health Organization (WHO), '*Cumulative Number of Confirmed Human Cases of Avian Influenza AI(H5N1) Reported to WHO*,' August 10, 2012, http://www.who.int/influenza/human_animal_interface/H5N1_cumulative_table_archives/en/index.html.

[2] WHO Avian Influenza Situation Update – Indonesia (Internal Document), Update No. 90, May 2011

respiratory illness. The HUS survey also aimed to understand perceptions about exposure to birds and the risk of H5N1 transmission. The C-KAP survey aimed to determine the extent to which physicians are knowledgeable about influenza-like illnesses (ILIs), risk factors for H5N1 virus infection (i.e., direct contact from touching or slaughtering sick or dead poultry; indirect contact from close contact with sick or dead poultry or visiting a wet poultry market; and direct or close contact with sick human H5N1 patients); and to describe the clinical practices related to seasonal influenza, pandemic influenza (H1N1), and H5N1.

SAFE summarized both of the research findings and developed condensed reports as well as slide presentations to share with SAFE stakeholders.

The HUS research abstract was presented as a poster board at the 15th International Congress on Infectious Disease, which was held in Bangkok on June 13-16, 2012, and presented to a MOH/WHO expert meeting on AI in Bekasi, Indonesia. The results of the HUS and C-KAP Survey and key messages were also presented to MOH on September 21 and 24, 2012. The presentation on September 21 was conducted at an evaluation meeting on influenza surveillance in East Jakarta. This meeting aimed to evaluate the influenza surveillance program in terms of case management, identification of seasonal influenza and H5N1 cases. The presentation on September 24 was conducted at an information dissemination meeting on the results of Surveillance Harmonization on Epidemiology and Virology of Influenza (H5N1 and other forms of flu).

The results of both the HUS and C-KAP will also be written for international peer review journals in collaboration with US Centers for Disease Control (US CDC) and John Hopkins University Center for Communication Program (JHUCCP).

II.1 Key findings of HUS

The following are the key findings of the HUS study:

- Individuals frequently do not seek care at a healthcare facility when they have a fever or cough, or suffer difficulty breathing, even if they are aware that they need immediate treatment for these symptoms.
- Households express a preference for self-treatment for respiratory symptoms using over-the counter medications from pharmacies or giving medicines and fluids at home.
- Routine contact with birds in the home can diminish perceptions of risk, leading to a lower likelihood of seeking care for potential symptoms of AI.
- Households with the highest exposure (i.e., those allowing poultry to roam freely indoors) demonstrated:
  - Weaker beliefs in the need for immediate treatment for respiratory symptoms;
  - Lower self-efficacy in seeking medical care when needed;
  - Lower self-efficacy in protecting themselves and their families from AI;
  - Less knowledge of the sources of exposure; and
  - Greater likelihood of using traditional remedies instead of healthcare facilities.
- High self-efficacy about seeking care when needed is influenced by:
  - Greater knowledge of the exposure routes of AI; and
  - Higher perception of the severity of AI.
- Shorter waiting time before seeking care is influenced by:
  - Greater knowledge of the exposure routes of AI; and

- Higher self-efficacy about seeking care when needed.

The table below shows information sources used by households. The data indicates that television and social networks (interpersonal channels) are the main information sources on AI.

Table I: Information Sources for AI

	Total	East Jakarta	Bogor
TV	90.4	88.6	92.3
Radio	4.1	4.3	3.8
Newspaper/Magazine/tabloid/book	10.7	14.3	6.8
Flyer/brochure/leaflet/poster/banner	3.9	5	2.7
Social network (events in the community, cadre, RT/RW, family, neighbor, community leader)	18.1	22.8	13
Government officer (Dinas Kesehatan dan Dinas Peternakan, Local offices)	4.2	6.3	1.8
New media (internet website, text through cellphone)	2.1	2.4	1.8
Puskesmas	3.3	5.4	1.9
Doctor	2	2.4	1.8

II.2. Key findings of Clinicians' KAP

The key findings of the C-KAP study are as follows:

- Most clinicians know the main clinical features of AI. Clinicians seem to be aware of some critical differences between H5N1 and other forms of flu.
- Considering the many potential sources of exposure to the H5N1 virus, clinicians tend to ask relatively few diagnostic questions (three or four, on average) to determine if suspected cases involved exposure, including handling of dead chickens, exposure to wild birds, and exposure to infected humans. A few doctors mentioned key questions regarding potential sources of poultry exposure at wet markets. This finding underlines the importance of getting the patient to volunteer such information during their interaction with the provider.
- Just under two thirds of clinicians said that treatment for H5N1 should begin within one day of the onset of symptoms.
- Less than half of clinicians surveyed said they had received official AI case management guidance. The guidance was generally received by clinicians at local health clinics (*puskesmas*) and public hospitals.
- Receipt of *any* case management guidance information has significantly improved:
  - Clinicians' knowledge of signs and symptoms of seasonal influenza, pandemic influenza (H1N1), and H5N1;
  - Perception of severity of pandemic influenza (H1N1);
  - Likelihood of asking questions about specific exposures to H5N1 (contact with dead poultry, handling live birds at wet markets in East Jakarta, keeping poultry at home in Bogor); and
  - Likelihood of testing after learning of exposure to H5N1.

- Greater exposure to mass media or professional resources regarding H5N1 significantly improved:
  - Clinicians' knowledge of the signs and symptoms of H5N1;
  - Perception of the severity of H5N1;
  - Likelihood of asking questions about all sources of exposure; and
  - Likelihood of testing for H5N1 after learning of exposure.
- In puskesmas, case management guidance information improved clinicians' knowledge of the signs and symptoms of H5N1, but did not improve their confidence in their own knowledge, equipment and resources available to diagnose and treat H5N1.

The table below depicts data on clinician source of information for AI. Overall, clinicians cited seminars/workshops, television, the internet, newspapers and medical journals as their main sources of information about avian influenza. Clinicians in Bogor were more likely than those in East Jakarta to cite television, radio, the internet educational lectures and seminar/workshops as main sources of avian flu information. Clinicians cited seminars and workshops as their most reliable source of AI information. Printed materials including pamphlets, brochure and poster were more likely mentioned as main information sources by clinicians in puskesmas and public hospital compared to clinicians in private services.

Table 2: Clinician Main Sources of Avian Flu Information

Clinician Main Sources of Avian Flu Information			
Media channel	**East Jakarta (n=239)**	**Bogor (n=315)**	**Total (n=554)**
TV	51.5	64.1	**58.7**
Radio	5	14.9	**10.7**
Newspaper	28.5	50.5	**41**
Pamphlet/Brochure	13.4	16.5	15.2
Poster	12.6	12.4	12.5
Internet Website	46.4	63.8	**56.3**
Email	3.8	4.4	4.2
Lecture/course	5.4	10.2	**8.1**
Seminar/workshop	56.1	70.2	**64.1**
MOH materials	25.9	30.8	28.7
Medical book	20.9	18.4	19.5
Medical journal	39.3	39.7	39.5
Colleague	17.2	22.5	20.2

III. Communication Strategy for Focused Interventions

Based on the key findings of both HUS and C-KAP surveys, the new funding levels and life-of-project, SAFE's strategy will focus on developing and building consensus around key health care seeking messages for a targeted audience, developing a communication poster, and disseminating the key messages through existing local partners and their networks.

The strategy takes into consideration that routine daily exposure to birds is a fact of life in Indonesia, with almost universal exposure to wet market risks among urban households. Most exposures to birds are not considered distinctive or noteworthy by the population at large. Complacency regarding risks associated with bird exposure is common. This suggests an **efficacy-based strategy** framed around "living safely with birds". The strategy will flag certain types of exposure (e.g., handling live or slaughtered birds at the wet market) as requiring vigilance, and educate patients to mention these distinctive types of exposure to providers when seeking care.

III.1. Target Audience

The targeted audience for this strategy is the person(s) responsible for healthcare decision-making at the household level

III.2. Key Messages

Key messages will serve as guidance to develop the creative content (textual, audio or visual) that will appear in communication materials (e.g. posters, broadcast materials, guidance/manual of intervention) particularly for local organizations or government agencies. The key messages developed based on the results of the two aforementioned studies, and enhanced by recommendations from MOH leadership, are as follows:

1. Do not self-medicate;
   2. Immediately seek medical care if you visited a live bird market or farm in the last 7 days and you are experiencing fever of 38 C or higher with one or more of the following symptoms: cough, sore throat, runny nose, and difficulty breathing; and
3. When you seek medical care, inform your physician about your contact history with poultry.

The key messages have been reviewed and approved for use by the MOH Directorate of Vector Borne Disease Control, Directorate of Communicable Disease Control and Directorate of Surveillance, Immunization, Quarantine and Matra Health. They will be finalized after input from WHO and USAID.

III.3. Communication materials and channels

SAFE will develop one new communication material in the form of a poster for house hold level health care decision makers. The key messages will be delivered through several communication channels used by existing project partners PMI, Aisyiyah and COMBINE.

The potential existing communication channels are:

- Online and social media channels: Suara Komunitas website, Aisyiyah Website, Facebook page and twitter;
- SMS gateway;
- Radio drama and the accompanying talk shows;
- Peer to peer/consumer outreach activities in markets and the surrounding communities; and
- Religious events.

IV. Evaluation

IV.1 Care-Seeking Qualitative Evaluation

(i) SAFE will conduct a qualitative evaluation early March 2013, through partners PMI, Aisyiyah and COMBINE to better understand targeted audience responses to program efforts aimed at improving health care seeking practices. A survey instrument will be developed to collect information and data on the following areas:

- Recall to case-seeking message
- Response/acceptance to care-seeking messages disseminated through materials and community activities
- Intention to take action after receiving the message
- Appropriateness of channels of communication

SAFE will summarize the findings and offer recommendations for future programming.